



# GUARDIAN OF PUBLIC HEALTH UPDATE

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## Preparedness and Planning

### GAO Report - Measuring Disaster Preparedness

The US Government Accountability Office (GAO) published testimony of William O. Jenkins, Jr., Director Homeland Security and Justice Issues to the Senate Committee on Homeland Security and Governmental Affairs. [The testimony](#) covers the Federal Emergency Management Agencies progress in assessing national capabilities.

### Thirty-three Caribbean Countries Hold Region's First Tsunami Alert Test

Thirty-three Caribbean countries, and the US, are participating in a [full-scale exercise](#) beginning March 23 to test the tsunami early warning system. Bulletins for the exercise are being issued through the West Coast/Alaska Tsunami Warning Center and the Pacific Tsunami Warning Center in Hawaii.

### Radiation at Fukushima: Basic Issues and Concepts

The release of radiation in Japan has caused great concern and confusion among the general public and the media alike, especially regarding the extent of the potential health risks that could occur as a result of the damaged Fukushima reactor. [This brief](#) is intended to help explain and put into context for a non-expert audience some of the often unfamiliar terminology and concepts associated with nuclear radiation.

### GAO Calls for Better Federal Food Safety Coordination

Last week the Government Accountability Office released a report on [federal food safety oversight](#). The report calls for results-oriented goals and performance benchmarks from the President-appointed Food Safety Working Group and more oversight on food imports.

### Nuclear Radiation Exposure and Health

Even as we listened with relief to news that the wind had blown radiation away from the centers of Japan's population, many of us are prompted to consider our own vulnerability. What would happen if we faced a similar event? The National Academies Press has published several reports about [preventive strategies](#) to mitigate the harmful health effects of radiation exposure in events of this nature.

### National Commission on Children and Disasters Hails Obama Administration Initiatives

Last week the Administration announced that it will [implement recommendations](#) from the National Commission on Children and Disasters 2010 Report to the President and Congress. The White House has formed an interagency working group to improve care for children in the planning, response and recovery to disasters.

## News

### Tsunami-Related Information for Healthcare Professionals

The CDC has [resources for healthcare professionals](#) addressing disease and health information, mental health, travel advice, and guidance for evaluating travelers returning from tsunami-affected areas.

### PACOM Distributing Potassium Iodide Pills

According to Air Force Times, US Pacific Command has [distributed potassium iodide](#) to Department of Defense personnel and their dependents in certain areas of Japan but are advising them not to take the pills unless instructed to do so.

### Hematopoietic Elements of Acute Radiation Sickness

The Clinicians' Biosecurity Network's brief primer on the hematopoietic syndrome of [acute radiation sickness](#) highlights some of the clinical issues that arise in treating those with potentially survivable acute exposures to radiation.

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Read the Next *Guardian* Issue!  
April 22, 2011

### **Radiation Injury After a Nuclear Detonation: Medical Consequences and the Need for Scarce Resources Allocation**

A review article published in Disaster Medicine and Public Health Preparedness discussed the [planning required for a complex nuclear detonation](#) scenario. In order to help create triage and incident management approaches, the authors reviewed the scientific literature for the health effects of radiation. They argue that acute radiation sickness should not be considered alone. Burns and other trauma should be considered as well. The authors concluded that there were four major findings from this review: Different species are affected by radiation differently; other outside factors can affect how the person is affected by radiation; traumatic and burn injuries can increase mortality due to radiation; and supportive care can reduce mortality due to radiation exposure.

### **FEMA partners with NDRN**

The Federal Emergency Management Agency (FEMA) and the National Disability Rights Network (NDRN) signed a [memorandum of agreement](#) to ensure that the access and functional needs of people with disabilities are incorporated into all aspects of planning for, responding to and recovering from disasters. Specifically, the agreement will ensure that advocates for the NDRN's 57 state and territory affiliates have access to FEMA disaster response offices, including workspace and logistical support, before, during and after a disaster, to be involved in policy decisions and coordinate directly with the entire emergency management team. This partnership will help FEMA leverage the resources of the entire community, including the resources the NDRN or other organizations can offer, to better meet the needs of the entire population impacted by a disaster.

### **Hospital Preparedness for Emergency Response: United States, 2008**

In National Health Statistics Reports authors analyze data from the 2008 National Hospital Ambulatory Medical Care Survey to [summarize hospital preparedness](#) for responding to public health emergencies. Their analysis yielded several key results such as: many hospitals have plans for most emergency events with the exception of explosive and incendiary events; half of the hospitals surveyed had plans for allocation of ventilation machines for mass casualty incidents; and one-third of the hospital surveyed included mass vaccination or medication distribution as part of their disaster drills.

## **Surveillance**

### **American Samoa's Governor asks for Radiation Monitoring Equipment**

Governor Tulafono of American Samoa has requested [radiation monitoring equipment](#) for the territory. Monitoring equipment is currently in place in Guam, Northern Marianas Islands, Hawaii and Alaska.

### **Vaccinia Virus Infections in Martial Arts Gym**

Researchers in Emerging Infectious Diseases report four cases of vaccinia virus infection in Maryland. [Vaccinia virus](#) is contained in the live smallpox vaccination given to certain healthcare, military, and laboratory personnel since 2002. These cases all attended a martial arts gym in Maryland which also had members from the military. While the true cause of infection of the four cases of vaccinia infection was concluded to be unknown, the researchers believe that it was spread by secondary transmission of someone who came into contact with a recent vaccinee who was not at the gym.

### **Move to Combat Bio-terror False Alarms - Just In Case**

A blog post from the San Francisco City Insider Blog talks about a major source of [bio-detection device false alarms](#). The author cites private businesses use of bio-detection as the main cause. City officials say that a false alarm costs an estimate of \$700,000 for the response as well as civil unrest.

### **The Endless Struggle**

An editorial from The Lancet Infectious Diseases addresses the issue of [antibiotic resistance](#). The authors mention how the face of antibiotic resistance has changed from only being known within healthcare circles to making headlines in the news. They argue that while antibiotic resistance is a pervasive problem, they suggest policies that will reduce the incidence rather than eradicate it. They cite surveillance is key in the fight against antibiotic resistance.

### **Outbreak of Tularemia in Central Norway**

Authors in Eurosurveillance study a [tularemia outbreak](#) of 39 cases in three counties in central Norway. The commonality between 34 of the 39 cases is that they had all been drinking water from private wells. The water in these private wells may have been contaminated with tularemia by way of the increased lemming population and snow melt.

### **Transmission of Avian Influenza A Viruses among Species in an Artificial Barnyard**

A study published in PLoS One analyzes the [pathway of influenza viruses](#) from waterfowl to domestic bird and mammalian species. To test this, the researchers infected mallard ducks with low pathogenic strains of H5N7 or H7N3 and placed them in an artificial barnyard stocked with chickens, blackbirds, rats and pigeons. They monitored viral shedding in each species for four weeks. The research showed that the ducks directly or indirectly infected all species with the influenza strains. All species except for a lone pigeon failed to shed the virus once infected.

### **Truly Emerging — A New Disease Caused by a Novel Virus**

Dr. Heinz Feldmann addresses the discovery and surveillance of emerging infectious diseases worldwide in an editorial published in the New England Journal of Medicine. Dr. Feldmann argues that disease surveillance and laboratory testing are key in [identifying new infectious diseases](#). He cites the rapid discovery and identification of severe fever with thrombocytopenia syndrome virus (SFTSV) as a testament of their importance. However, there are barriers to new infectious disease identification especially in developing countries. Dr. Feldmann says that developing countries do not have the resources to implement the required steps in order to quickly identify new diseases.

## **Communications**

### **CDC Adds Radiation Website Tools**

The CDC has created a [Radiation Badge](#) for the [media gallery](#) that you can copy and paste into your website, social network profile, blog, or email to provide people with access to information about radiation and health. The [CDC Content Syndication](#) catalog has also recently been expanded to include information on Radiation

Emergencies including:

- Information for Clinicians
- Frequently Asked Questions on Radiation Emergencies
- Fact Sheet on Radiation and Potassium Iodide

### **HHS Launches New Consumer-Focused Immunization Website**

The Department of Health and Human Services launched a website centering on vaccines and immunizations. This website will provide vaccination recommendations for both adults and children in an easily accessible format. The new website is [www.vaccine.gov](http://www.vaccine.gov)

### **CDC Puts Message Mapping Guide Online**

Message maps are one of the most powerful tools available for risk communicators. [Message maps](#) enable quick, concise delivery of pertinent information. This new CDCynergy tool guides you step-by-step through the process of developing your own message maps. The tool is based on the message mapping process developed by Dr. Vincent Covello and published in the Journal of Emergency Management (Risk communication and message mapping: A new tool for communicating effectively in public health emergencies and disasters, Journal of Emergency Management, Vol. 4, No. 3, May/June 2006).

## **Pandemic Planning**

### **BARDA funds advanced development of new influenza antiviral**

A contract has been awarded to develop a long-acting [single-dose antiviral](#) drug for use in the United States, the U.S. Biomedical Advanced Research and Development Authority (BARDA) announced today. The drug, CS-8958, is currently marketed in Japan under the name Inavir and is in the same class of drugs as the currently approved influenza antiviral drugs Tamiflu and Relenza. CS-8958 requires only a single dose for full treatment, as opposed to the five days of twice daily dosing required for Tamiflu and Relenza. CS-8958 also may be effective against influenza viruses known to be resistant to Tamiflu.

### **UK Proposes More Flexible Pandemic Plan**

This week health officials in the United Kingdom released an [updated pandemic preparedness plan](#) after lessons learned from H1N1. The plan allows for more flexibility in response depending on the severity of the pandemic.

### **Effect of School Closure from Pandemic (H1N1) 2009, Chicago, Illinois**

A letter to the Editor published in Emerging Infectious Diseases analyzes the effects of an [elementary school closure](#) during 2009 pandemic influenza H1N1 in Chicago, Ill. The elementary school was closed from April 29 to May 6, 2009 after a single lab-confirmed case of 2009 pandemic influenza H1N1 was found. The researchers surveyed 170 households on how the school closure affected them and if the students complied with mitigation recommendations. The survey showed that there was little negative economic effect to the families due to school closure. They also found that most of the students complied with the mitigation recommendations.

## **Regional News**

### **Region 2 North Long Term Care Work Group Strategy**

Region 2 North Healthcare Coalition is progressing well with the regional Long Term Care (LTC) emergency preparedness work group strategy. The regional LTC work group began with a narrow focus on hospital emergency preparedness requirements. After reviewing LTC work groups in other regions and meeting with regional partners, Region 2 North decided to try a more inclusive approach. Dave Every, the regional consultant working on the project, expanded participation in the workgroup to each of the counties in the region to work on topics that would go beyond emergency preparedness. Both the region and counties within the region participated in needs assessment surveys and hazards vulnerability analysis projects. The workgroup highlighted the need to see more Long Term Care facilities participating on the Michigan Health Alert Network and to obtain information on each facility's bed availability. The region started with Oakland County and collaborated with them on their LTC conference, held on March 30, 2011. Approximately 50 people attended the

conference which gave the LTC agency representatives opportunities to hear from many Oakland County departments and the region. Presenters included members of Public Health, Emergency Management, Medical Control Authority, Health Division Medical Services, Environmental Health, Administrative Health Services, Epidemiology, and Region 2 North. The half day conference was a big success and will hopefully lead to an active LTC work group for the county and the region. Amber Pitts, from the Office of Public Health Preparedness, also attended the conference to lend support. Oakland County invited representatives from Macomb County and St. Clair County to attend and observe to help facilitate ideas for their own upcoming conferences.

The region is currently working with Macomb County and St. Clair County on conferences being scheduled in the next few months. Workgroup members will also be attending the State-wide Long Term Care Emergency Preparedness Solutions Conference on April 11, 2011 to continue efforts to enhance LTC emergency preparedness in Region 2 North.

## Other News

### **U.S. Looks to Safeguard Medical Isotopes from Terrorists**

The National Nuclear Security Administration is working to improve safeguards at hospitals to prevent medical isotopes being accessed by terrorists. These measures include training of law enforcement and security guards as well as mechanical delaying devices for blood irradiators and other machines.

### **Results of Local Health Department Job Losses Survey Demonstrates Depth of Program Cuts**

Yesterday NACCHO released information from its 2010 survey, which found that 29,000 local health department jobs have been cut since January 2008 or approximately 19% of the local health department workforce. An additional 18,000 jobs were subject to reduced hours or furloughs.

### **TFAH Report released on Public Health Funding and Key Health Facts**

New resources are available from Trust for America's Health (TFAH) and the Robert Wood Johnson Foundation (RWJF) - Investing in America's Health: A State-By-State Look At Public Health Funding And Key Health Facts. This annual report examines public health funding and key health facts in states around the country. The full report, as well as state-by-state fact sheets with key health data, can be found at the TFAH website.

### **Reforming the World Health Organization**

Authors in the Journal of the American Medical Association answer the question posed by Jack Chow, the former World Health Organization (WHO) assistant director-general, "Is the WHO becoming irrelevant?" The authors argue that a much stronger WHO is necessary in order to benefit the world and its health. They suggest that the WHO make a more transparent organization with governments around the world being able to track how their resources are used. They also suggest that the WHO use its authority to create more authoritative policy citing that in its over 60 years of existence they have only instituted two treaties.



# Training & Education

## **New CERT Training from FEMA**

The FEMA webinar on the updated CERT Basic Training and new CERT courses has been recorded and may be accessed at your convenience. Over 1,200 participants joined us in the live webinar. You may view the webinar recording by going to the [Community Preparedness Webinar Series webpage](#) entitled "New CERT Training from FEMA" and clicking on View Webinar Recording.

## **FEMA Webinars on Functional Needs Support Services**

An Overview of Functional Needs Support Services (FNSS)

This is an informative one hour overview of FNSS in General Population Shelters. This webinar and conference call will introduce planning guidance that can be incorporated into existing shelter plans to meet access and functional needs in general population shelters. This webinar further explores FNSS in congregate shelter settings and provides participants with case studies to generate discussion around best practices.

When:

- Tuesday, May 3rd, 2011 - 10am-11pm (Central) or
- Friday, June 10th, 2011 - 10am-11am (Central)

Applied Functional Needs Support Services (FNSS)

Join FEMA Region VII for an informative one hour webinar discussing applications in Functional Needs Support Services (FNSS) in General Population Shelters. This webinar further explores FNSS in congregate shelter settings and provides participants with case studies to generate discussion around best practices.

When:

- Tuesday, April 26th, 2011 - 1pm - 2pm (Central)
- Monday, May 9th, 2011 - 2pm - 3pm (Central) or
- Tuesday, June 7th, 2011 - 2pm - 3pm (Central)

For both webinars: Go to <https://connect.hsin.gov/regionvii/>

## **"Just in Time" Training from Columbia University: Radiation 101**

The Columbia University Regional Learning Center has posted a 36-minute just-in-time [training video](#) for the mid-level public health workforce on the potential health effects of radioactive emissions. More free training resources are available at: [www.ncdp.mailman.columbia.edu/japanearthquake.html](http://www.ncdp.mailman.columbia.edu/japanearthquake.html).

## **Archived Webcast on Immunization of Healthcare Workers**

The MidAtlantic Public Health Training Center's March 16, 2011 Public Health Practice Grand Rounds webcast: "Immunization of Healthcare Workers: Recommendations and Challenges" is now archived and [available for viewing](#).

## **Yale New Haven Center for Emergency Preparedness and Disaster Response Courses**

[EM110: Introduction to Radiological Emergency Preparedness](#)

Lack of knowledge regarding the nature of radiation and what it can and cannot do is the main reason why people are likely to panic in a radiological or nuclear emergency. EM 110 is designed to provide hospital and health care workers with an awareness-level understanding of the basics of radiation and its potential consequences, the ability to recognize various situations involving radiation and radioactive materials in the health care environment and proper actions to take to protect themselves from the adverse effects of radiation in an emergency situation.

[EM 210: Advanced Radiological Emergency Preparedness for Clinicians](#)

Misconceptions held by the clinical community about radiation and its potential medical consequences may result in inappropriate treatment and suboptimal

medical care for victims of a radiation or nuclear incident. EM 210 is designed for clinicians with an interest in understanding radiation concepts, the medical effects of radiation on biological systems, radiation countermeasures and essential elements for dealing with radiological and nuclear emergencies in the healthcare environment.

#### EM 150: Introduction to Evacuations

All health care facilities are at risk for incidents that lead to partial or full evacuations, from water pipe breaks to fires to natural disasters to human-made incidents. To ensure the safety of patients and staff, personnel at all levels within an organization must be trained on key concepts to prepare them for their role in a facility evacuation. Introduction to Evacuations (EM 150) aligns with safety regulations from the Occupational Safety and Health Administration and the National Fire Protection Association, as well as required capabilities and standards of the federal Department of Health and Human Services and the Office of the Assistant Secretary for Preparedness. The release of radiation in Japan, therefore, has caused great concern and confusion among the general public and the media alike, especially regarding the extent of the potential health risks that could occur as a result of the damaged Fukushima reactor. This brief is intended to help explain and put into context for a nonexpert audience some of the often unfamiliar terminology and concepts associated with nuclear radiation<sup>4.14</sup> and EP 7.

| Date/Time     | Event  | Location   |
|---------------|--|--|
| Apr. 11, 2011 | <b>2011 Emergency Preparedness Solutions for Long Term Care Conference</b><br>Both federal and state laws require skilled, licensed long term care facilities to have a written disaster plan. This conference will provide attendees with resources, templates, personal experiences and lessons learned from prior disaster experiences, while allowing time for networking with partners in emergency preparedness. This conference is open to Michigan long term care administrators, directors of nursing, social work directors, safety/emergency preparedness officers, and surveyors. Please note there is a limit of two representatives per facility. There is no fee for attending this conference. For more information, including registration details, please visit the <a href="#">MI-TRAIN website</a> and search for course ID#: 1025029. | Suburban Collection Showplace<br>Novi, MI                      |
| May 2, 2011   | <b>Supporting Youth into Healthy Productive Adulthood</b><br>This workshop is for individuals working with young people in faith-based organizations, schools, and youth groups in Wayne County. Participants will explore ways to give parents/caregivers, teachers, and others working with children the tools they need to make responsible decisions. CUEs are available. Cost: \$10-\$15. <a href="#">Click here</a> for more information, including registration information.  | Detroit, MI<br><br>Additional MI Locations:<br>May 7 - Detroit |
| May 3, 2011   | <b>Great Lakes Homeland Security Training Conference &amp; Expo</b><br>This <a href="#">annual conference</a> brings together more than 1,200 attendees from a variety of disciplines including law enforcement, fire, public health and health care, school administration, emergency management, and the private sector.   | Grand Rapids, MI   |

| Date/Time    | Event   | Location                              |
|--------------|---|---------------------------------------|
| May 5, 2011  | <b>Great Lakes Border Health Initiative Conference</b><br>Save the date for this important international conference. As more information becomes available, it will be posted on <a href="#">Michigan's border health webpage</a> .   | Niagara Falls, NY                     |
| May 10, 2011 | <b>International Crisis &amp; Risk Communication Conference (ICRC)</b><br><a href="#">This conference</a> will discuss best practices in crisis communication as well as new avenues for communication, the growing role of Social Media and the internal struggles that crisis communicators face with suggestions for overcoming them. Experts speakers include current and former top executives from some of the most prominent organizations throughout the world and leading scholars from the top research universities, including those from the Centers for Disease Control (CDC), Federal Emergency Management Agency (FEMA), U.S. Coast Guard, BP, Walt Disney World, AirTran Airways and the U.S. Department of Homeland Security.  | Orlando, FL                           |
| May 12, 2011 | <b>2011 EMS Summit</b><br>This three-day conference provides excellent information and training opportunities for pre-hospital providers. There are over 20 credits available, including specialty credits. Visit the <a href="#">Huron-Sanilac EMS network website</a> for more information including agenda, speaker bios, and registration details.  | Bavarian Inn Lodge<br>Frankenmuth, MI |
| May 16, 2011 | <b>National Level Exercise 2011</b><br>Emergency planners, responders, and receivers in the United States are preparing for an earthquake similar to - or even larger than - the one that just ravaged Japan. The Federal Emergency Management Agency's, National Level Exercise 2011, May 16-19, will address this concern and help the nation prepare and train for a similar disaster situation. Specifically, this exercise will simulate a major earthquake in the New Madrid Seismic Zone, the site of the largest earthquake in U.S. history (1811-1812). Bruce Piring, Instructor at the University of Missouri Fire and Rescue Training Institute, and Col. (US Army, ret.) Fenton "Dutch" Thomas, Chief Operating Officer at My LifePlan Inc. discuss the benefits of federal, state, and local cooperation when preparing for catastrophic events. Listen to NLE Roundtable Interview. |                                       |
| May 25, 2011 | <b>Communicable Disease Conference</b><br><a href="#">This conference</a> seeks to provide the latest knowledge on communicable disease diagnosis, surveillance, reporting, laboratory test interpretation, and incorporation of epidemiologic principals. The target audience includes communicable disease nurses, epidemiologists, medical officers, health officers, infection control professionals, environmental health specialists, physicians, or any other health professional interested in communicable diseases.   | Doubletree Hotel<br>Bay City, MI      |



| Date/Time     | Event   | Location                                   |
|---------------|---|--|
| Jun. 19, 2011 | <b>21st World Conference on Disaster Management</b><br>This year's <u>conference</u> will bring emergency response and management delegates from over 40 countries. The WCDM offers a program that challenges delegates by examining traditional concepts and methods, and provides: new ideas and approaches to problem solving; both leading edge and topical presentations; opportunities to connect with key individuals and organizations across the disaster management spectrum. | Metro Convention Center<br>Toronto, CANADA |
| Jul 6, 2011   | <b>2011 Chemical Security Summit</b><br>The <u>fifth annual summit</u> will provide a forum for representatives from the chemical community to exchange information and network with other security professionals, to share best practices, to find out about chemical security regulations, and to gain insight into the roles of state, local, and federal agencies and departments involved in chemical security.  | Baltimore, MD                              |



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